



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

C3-3-4

Job Sheet 175633



Part No: C3-3-4

Job Qty: 10 ea

Part Name: Link Pin



Part Weight: 0 lbs

Job Created: 4/9/18

Due Date: 4/30/18

Type: SOLD

Status: Scheduled

Job Tracking No:

Created By: Marie Lajeunesse

Description:

Priority: Medium

Note: DWG C3-3-4 Rev 1A IPP Rev A 18.04.06 new issue DP Verify DD

Ship Via:

### Bill of Materials

### Job Routing

| Op No | Operation          | Qty    | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off |
|-------|--------------------|--------|------------|----------|-----------|---------|-----------------------|-----------|----------|
|       |                    |        |            |          | Setup hrs | Run Hrs | Workcenter / Supplier | Lead Time |          |
| 90    | Start up Operation | 10 Ea  |            | 4/28/18  | 0.00      | 0.00    | Start Up Machining-3  |           |          |
| 110   | Mori Seiki         | 10 pcs |            | 4/30/18  | 0.00      | 0.67    | MORI SL-154           |           |          |
| 120   | QC                 | 10 pcs |            | 4/30/18  | 0.00      | 0.00    | QC2 Machining-4       |           |          |
| 130   | QC                 | 10 pcs |            | 4/30/18  | 0.00      | 0.00    | QC8 Machining-4       |           |          |
| 135   | Outsource          | 10 pcs |            | 4/30/18  | 0.00      | 0.00    | Outsource1            |           |          |
| 140   | Outsource          | 10 pcs |            | 4/30/18  | 0.00      | 0.00    | Outsource15           |           |          |
| 150   | Packaging          | 10 pcs |            | 4/30/18  | 0.00      | 0.00    | Packaging2            |           |          |
| 160   | QC                 | 10 pcs |            | 4/30/18  | 0.00      | 0.00    | QC6                   |           |          |
| 210   | Packaging          | 10 pcs |            | 4/30/18  | 0.00      | 0.00    | Packaging3-1          |           |          |
| 220   | QC21-SA            | 10 Ea  |            | 4/30/18  | 0.00      | 0.00    | QC21                  |           |          |

Part Op 110 - 1-Machine as per folio FC 049 FOLIO REV: 9-84 DWG REV: 2-Debur

Descriptions: 135 - 1 Issue P/O to Metcore - P/O 020007 RC 53-56 2-Bead blast 3- Certificate of Conformity is required

\*\*\*NOTE\*\*\* DROP SHIP TO FINISHER Metcore to ship directly to Groupe Altech\*\*\*

140 - Issue P/O to Groupe Altech: P/O 03962 -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004-.0006 -Bake after plating -Certificate of Conformity is required

### Job BOM

| Part / Item  | Component Name                  | Quantity            | Operation             | Container |
|--------------|---------------------------------|---------------------|-----------------------|-----------|
| MT-O1-R0.125 | Tool Steel Round Bar 0.125 dia. | .5750 ft (.0575 ea) | 90-Start up Operation |           |

### Job Allocations

| Operation             | Component Part | Required | Inventory | Allocated |
|-----------------------|----------------|----------|-----------|-----------|
| 90-Start up Operation | MT-O1-R0.125   | 1        | 0         | 0         |



Container No: S068394



Part: C3-3-4

Job No: 175633

Serial No/Batch: S068394

Revision: 1A

Inspector:

Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
CANADA  
TEL.: 1 613 632-5200  
Email: sales@dartaero.com  
www.dartaerospace.com

2:32 PM Dart.lajeunesse.marie

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_ Work Order update only ☐

|                   |                                                                                                                                                                                |                                        |                                     |                                              |                                      |  |  |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------|--|--|
| Work Order: _____ | <b>DISPOSITION</b><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b>      |                                     |                                              |                                      |  |  |
| Part No. _____    |                                                                                                                                                                                | Skid-tube <input type="checkbox"/>     | Cross tube <input type="checkbox"/> | Water Jet <input type="checkbox"/>           | Engineering <input type="checkbox"/> |  |  |
|                   |                                                                                                                                                                                | Machining <input type="checkbox"/>     | Small Fab <input type="checkbox"/>  | Prod. Eng. Coord. <input type="checkbox"/>   | Quality <input type="checkbox"/>     |  |  |
| NCR No. _____     |                                                                                                                                                                                | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/>  | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/>       |  |  |
|                   |                                                                                                                                                                                | Large Fab <input type="checkbox"/>     | Composite <input type="checkbox"/>  | Supplier <input type="checkbox"/>            |                                      |  |  |

|                                  |               |                       |                                              |
|----------------------------------|---------------|-----------------------|----------------------------------------------|
| Date : _____                     | Step #: _____ | QTY Effective : _____ | MRB (QSI042) Approval                        |
| Description Work Order Deviation |               | Disposition           | Completed By                                 |
|                                  |               |                       | Lead hand / Supervisor Approval Verification |
|                                  |               |                       |                                              |
|                                  |               |                       | QC / QA Coordinator Approval                 |

| Root Cause                                  |                                                |                                                 |                                                            | FAULT CATEGORY                                 |                                               |  |  |
|---------------------------------------------|------------------------------------------------|-------------------------------------------------|------------------------------------------------------------|------------------------------------------------|-----------------------------------------------|--|--|
| Environment <input type="checkbox"/>        | No Re-verification <input type="checkbox"/>    | Pressure/Forced <input type="checkbox"/>        | Temperature/Cure <input type="checkbox"/>                  | Power Loss/Surge <input type="checkbox"/>      | Positioned Wrong <input type="checkbox"/>     |  |  |
| Design <input type="checkbox"/>             | Operator <input type="checkbox"/>              | Bending <input type="checkbox"/>                | Set-up <input type="checkbox"/>                            | Folio/Program <input type="checkbox"/>         | Outside Dimensions <input type="checkbox"/>   |  |  |
| Doc/Data <input type="checkbox"/>           | Offset/Setup <input type="checkbox"/>          | Centre Not Concentric <input type="checkbox"/>  | BOM/Route <input type="checkbox"/>                         | Grain <input type="checkbox"/>                 | Over/Under tolerance <input type="checkbox"/> |  |  |
| Equip/Tooling <input type="checkbox"/>      | Supplier <input type="checkbox"/>              | Cracks <input type="checkbox"/>                 | Broken/Damage/Defect <input type="checkbox"/>              | Weld <input type="checkbox"/>                  | Part Incorrect <input type="checkbox"/>       |  |  |
| Handling/Pre <input type="checkbox"/>       | Training <input type="checkbox"/>              | Crimp/Kink/Ripple/Wave <input type="checkbox"/> | Inspection Incomplete/Unqualified <input type="checkbox"/> | Wrong Stock Pulled <input type="checkbox"/>    | Part Lost/Missing <input type="checkbox"/>    |  |  |
| Material <input type="checkbox"/>           | Use for Testing <input type="checkbox"/>       | Cuffs <input type="checkbox"/>                  | Contamination <input type="checkbox"/>                     | Out of Sequence <input type="checkbox"/>       | Part Moved <input type="checkbox"/>           |  |  |
| Internal Transport <input type="checkbox"/> | Poor Information <input type="checkbox"/>      | Crushing <input type="checkbox"/>               | Countersink <input type="checkbox"/>                       | Off-set <input type="checkbox"/>               | Drawing <input type="checkbox"/>              |  |  |
| Tribal Knowledge <input type="checkbox"/>   | Rushing <input type="checkbox"/>               | Heat Treat <input type="checkbox"/>             | Cut Too Short <input type="checkbox"/>                     | Mislabeled <input type="checkbox"/>            | Finish <input type="checkbox"/>               |  |  |
| LOA <input type="checkbox"/>                | Product Improvement <input type="checkbox"/>   | Wave/Twist in Tube <input type="checkbox"/>     | Instructions Incomplete/Unclear <input type="checkbox"/>   | Fit/Function <input type="checkbox"/>          | Misread <input type="checkbox"/>              |  |  |
| Substation <input type="checkbox"/>         | Process Improvement <input type="checkbox"/>   | Marks/Chatter <input type="checkbox"/>          | Drill Holes <input type="checkbox"/>                       | Misaligned/off center <input type="checkbox"/> | Turning Sequence <input type="checkbox"/>     |  |  |
| Past Expiry Date <input type="checkbox"/>   | Manufacturing Process <input type="checkbox"/> |                                                 |                                                            |                                                |                                               |  |  |
| Misidentified <input type="checkbox"/>      | Past Due <input type="checkbox"/>              | OTHER : _____                                   |                                                            |                                                |                                               |  |  |





DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

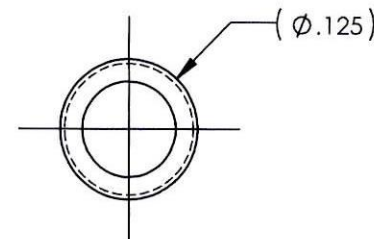
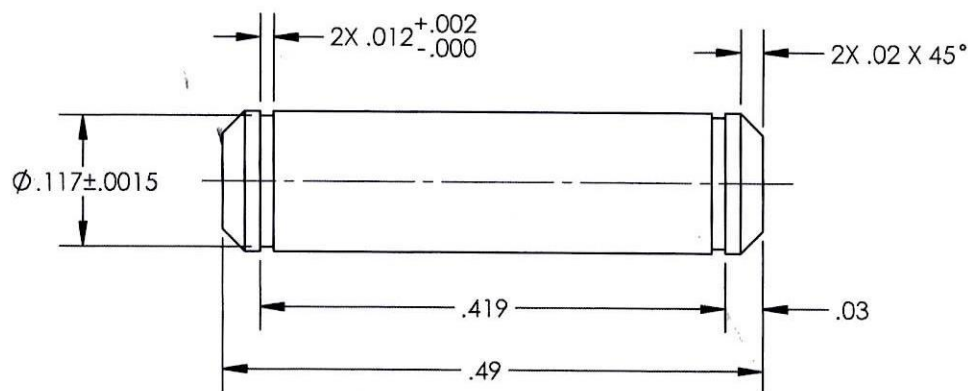
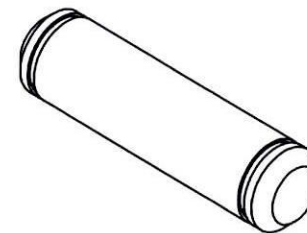
QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

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| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>             Skid-tube <input type="checkbox"/><br/>             Machining <input type="checkbox"/><br/>             Thermoforming <input type="checkbox"/><br/>             Large Fab <input type="checkbox"/> </div> <div>             Cross tube <input type="checkbox"/><br/>             Small Fab <input type="checkbox"/><br/>             Finishing <input type="checkbox"/><br/>             Composite <input type="checkbox"/> </div> <div>             Water Jet <input type="checkbox"/><br/>             Prod. Eng. Coord. <input type="checkbox"/><br/>             Rec/Store/Packaging <input type="checkbox"/><br/>             Supplier <input type="checkbox"/> </div> <div>             Engineering <input type="checkbox"/><br/>             Quality <input type="checkbox"/><br/>             Other <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                            |  |                                              |  |
| Date :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Step #:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | QTY Effective :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | MRB (QSI042) Approval                        |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Completed By                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Lead hand / Supervisor Approval Verification |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | QC / QA Coordinator Approval                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                              |  |
| Root Cause                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | FAULT CATEGORY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                              |  |
| <div style="display: flex;"> <div style="flex: 1;">           Environment <input type="checkbox"/><br/>           Design <input type="checkbox"/><br/>           Doc/Data <input type="checkbox"/><br/>           Equip/Tooling <input type="checkbox"/><br/>           Handling/Pre <input type="checkbox"/><br/>           Material <input type="checkbox"/><br/>           Internal Transport <input type="checkbox"/><br/>           Tribal Knowledge <input type="checkbox"/><br/>           LOA <input type="checkbox"/><br/>           Substation <input type="checkbox"/><br/>           Past Expiry Date <input type="checkbox"/><br/>           Misidentified <input type="checkbox"/> </div> <div style="flex: 1;">           No Re-verification <input type="checkbox"/><br/>           Operator <input type="checkbox"/><br/>           Offset/Setup <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Training <input type="checkbox"/><br/>           Use for Testing <input type="checkbox"/><br/>           Poor Information <input type="checkbox"/><br/>           Rushing <input type="checkbox"/><br/>           Product Improvement <input type="checkbox"/><br/>           Process Improvement <input type="checkbox"/><br/>           Manufacturing Process <input type="checkbox"/><br/>           Past Due <input type="checkbox"/> </div> </div> | <div style="display: flex;"> <div style="flex: 1;">           Pressure/Forced <input type="checkbox"/><br/>           Bending <input type="checkbox"/><br/>           Centre Not Concentric <input type="checkbox"/><br/>           Cracks <input type="checkbox"/><br/>           Crimp/Kink/Ripple/Wave <input type="checkbox"/><br/>           Cuffs <input type="checkbox"/><br/>           Crushing <input type="checkbox"/><br/>           Heat Treat <input type="checkbox"/><br/>           Wave/Twist in Tube <input type="checkbox"/><br/>           Marks/Chatter <input type="checkbox"/> </div> <div style="flex: 1;">           Temperature/Cure <input type="checkbox"/><br/>           Set-up <input type="checkbox"/><br/>           BOM/Route <input type="checkbox"/><br/>           Broken/Damage/Defect <input type="checkbox"/><br/>           Inspection Incomplete/Unqualified <input type="checkbox"/><br/>           Contamination <input type="checkbox"/><br/>           Countersink <input type="checkbox"/><br/>           Cut Too Short <input type="checkbox"/><br/>           Instructions Incomplete/Unclear <input type="checkbox"/><br/>           Drill Holes <input type="checkbox"/> </div> </div> | <div style="display: flex;"> <div style="flex: 1;">           Power Loss/Surge <input type="checkbox"/><br/>           Folio/Program <input type="checkbox"/><br/>           Grain <input type="checkbox"/><br/>           Weld <input type="checkbox"/><br/>           Wrong Stock Pulled <input type="checkbox"/><br/>           Out of Sequence <input type="checkbox"/><br/>           Off-set <input type="checkbox"/><br/>           Mislabeled <input type="checkbox"/><br/>           Fit/Function <input type="checkbox"/><br/>           Misaligned/off center <input type="checkbox"/> </div> <div style="flex: 1;">           Positioned Wrong <input type="checkbox"/><br/>           Outside Dimensions <input type="checkbox"/><br/>           Over/Under tolerance <input type="checkbox"/><br/>           Part Incorrect <input type="checkbox"/><br/>           Part Lost/Missing <input type="checkbox"/><br/>           Part Moved <input type="checkbox"/><br/>           Drawing <input type="checkbox"/><br/>           Finish <input type="checkbox"/><br/>           Misread <input type="checkbox"/><br/>           Turning Sequence <input type="checkbox"/> </div> </div> |  |                                              |  |
| OTHER : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                              |  |

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| REVISIONS |         |                                                                                                                 |           |         |          |
|-----------|---------|-----------------------------------------------------------------------------------------------------------------|-----------|---------|----------|
| REV       | ECR     | DESCRIPTION                                                                                                     | DATE      | INITIAL | APPROVED |
| 1         |         | CH'D MATERIAL FROM 01 TO DRILL ROD.                                                                             | 8/17/2012 | JAG     |          |
| 1A        | 14-0111 | CH'D TITLE BLOCK WAS RED BARN IS DART. ADDED BAG & LABEL NOTE. CH'D DIMENSION WAS .487 IS .49, WAS .034 IS .03. | 8/6/2014  | DJN     | RW       |



**NOTE:**

1. BAG & LABEL WITH BATCH NUMBER.
2. NICKEL PLATE .0004-.0006 BAKE AFTER PLATING.

|                                                        |                        |
|--------------------------------------------------------|------------------------|
| <b>DART<br/>AEROSPACE</b>                              |                        |
| TITLE<br><b>LINK PIN</b>                               |                        |
| DWG NO.                                                | C3-3-4                 |
| MAT'L                                                  | DRILL ROD              |
| UNLESS OTHERWISE SPECIFIED<br>DIMENSIONS ARE IN INCHES | DRAWN BY: CANAM        |
| .XXX ± .005                                            | APPROVED <i>D Weil</i> |
| .XX ± .01                                              | HEAT TREAT RC 53-56    |
| .X ± .1                                                | FINISH SEE NOTE 2      |
| ANGLES ± 5°                                            | SPEC                   |
| 1. BREAK ALL SHARP EDGES .015 x 45°<br>OR .015R        | USED ON MODEL          |
| 2. DIMENSIONAL LIMITS APPLY AFTER PLATING              |                        |
| SCALE 6:1                                              | DATE 11/8/2001         |
| SHEET 1 OF 1                                           |                        |

| ASSY QTY | ASSY QTY | B/O | Part # | UNIT QTY | Description | Material  | B/O INFORMATION OR SPECIFICATIONS | PG. |
|----------|----------|-----|--------|----------|-------------|-----------|-----------------------------------|-----|
|          |          |     | C3-3-4 | 1        | LINK PIN    | DRILL ROD | Ø1/8 X 5/8                        |     |



DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                              |  |
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| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                         |  |                                              |  |
| Date : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Step #: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | QTY Effective : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | MRB (QSI042) Approval                        |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | Completed By                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Lead hand / Supervisor Approval Verification |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | QC / QA Coordinator Approval                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                              |  |
| Root Cause                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | FAULT CATEGORY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                              |  |
| <div style="display: flex;"> <div style="flex: 1;">           Environment <input type="checkbox"/><br/>           Design <input type="checkbox"/><br/>           Doc/Data <input type="checkbox"/><br/>           Equip/Tooling <input type="checkbox"/><br/>           Handling/Pre <input type="checkbox"/><br/>           Material <input type="checkbox"/><br/>           Internal Transport <input type="checkbox"/><br/>           Tribal Knowledge <input type="checkbox"/><br/>           LOA <input type="checkbox"/><br/>           Substation <input type="checkbox"/><br/>           Past Expiry Date <input type="checkbox"/><br/>           Misidentified <input type="checkbox"/> </div> <div style="flex: 1;">           No Re-verification <input type="checkbox"/><br/>           Operator <input type="checkbox"/><br/>           Offset/Setup <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Training <input type="checkbox"/><br/>           Use for Testing <input type="checkbox"/><br/>           Poor Information <input type="checkbox"/><br/>           Rushing <input type="checkbox"/><br/>           Product Improvement <input type="checkbox"/><br/>           Process Improvement <input type="checkbox"/><br/>           Manufacturing Process <input type="checkbox"/><br/>           Past Due <input type="checkbox"/> </div> </div> | <div style="display: flex;"> <div style="flex: 1;">           Pressure/Forced <input type="checkbox"/><br/>           Bending <input type="checkbox"/><br/>           Centre Not Concentric <input type="checkbox"/><br/>           Cracks <input type="checkbox"/><br/>           Crimp/Kink/Ripple/Wave <input type="checkbox"/><br/>           Cuffs <input type="checkbox"/><br/>           Crushing <input type="checkbox"/><br/>           Heat Treat <input type="checkbox"/><br/>           Wave/Twist in Tube <input type="checkbox"/><br/>           Marks/Chatter <input type="checkbox"/> </div> <div style="flex: 1;">           Temperature/Cure <input type="checkbox"/><br/>           Set-up <input type="checkbox"/><br/>           BOM/Route <input type="checkbox"/><br/>           Broken/Damage/Defect <input type="checkbox"/><br/>           Inspection Incomplete/Unqualified <input type="checkbox"/><br/>           Contamination <input type="checkbox"/><br/>           Countersink <input type="checkbox"/><br/>           Cut Too Short <input type="checkbox"/><br/>           Instructions Incomplete/Unclear <input type="checkbox"/><br/>           Drill Holes <input type="checkbox"/> </div> </div> | <div style="display: flex;"> <div style="flex: 1;">           Power Loss/Surge <input type="checkbox"/><br/>           Folio/Program <input type="checkbox"/><br/>           Grain <input type="checkbox"/><br/>           Weld <input type="checkbox"/><br/>           Wrong Stock Pulled <input type="checkbox"/><br/>           Out of Sequence <input type="checkbox"/><br/>           Off-set <input type="checkbox"/><br/>           Misabeled <input type="checkbox"/><br/>           Fit/Function <input type="checkbox"/><br/>           Misaligned/off center <input type="checkbox"/> </div> <div style="flex: 1;">           Positioned Wrong <input type="checkbox"/><br/>           Outside Dimensions <input type="checkbox"/><br/>           Over/Under tolerance <input type="checkbox"/><br/>           Part Incorrect <input type="checkbox"/><br/>           Part Lost/Missing <input type="checkbox"/><br/>           Part Moved <input type="checkbox"/><br/>           Drawing <input type="checkbox"/><br/>           Finish <input type="checkbox"/><br/>           Misread <input type="checkbox"/><br/>           Turning Sequence <input type="checkbox"/> </div> </div> |  |                                              |  |
| OTHER : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                              |  |



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# **PURCHASE ORDER** **PO039962**

**Supplier:** GRO002-VC  
Group Altech  
2455 Halpern  
St Laurent  
QC  
H4S 1N9 Canada  
Phone: 514-335-3666  
Fax: 514-335-3868

**PO No:** PO039962  
**PO Date:** 5/23/18  
**Due Date:** 5/28/18  
**Purchase Order Revision:**  
**Revision Date:**  
**Ship-To Contact:** Tsimiklis, ChrisoulaPhone:

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground  
**Pymt Terms:** Net 30  
**Freight Terms:**  
**Special Comments:**

## Items

| Line Item | Job    | Part     | Description                                                                                                                                                                                       | Status | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (CAD)             | Extended Price |
|-----------|--------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------|----------------|-------------------|---------|------------------------------|----------------|
| 1         | 175728 | C45-13-1 | Keeper Bushing<br>-Issue P/O to Groupe Altech: P/O<br><br>-Nickel plate, QQ-N-290, Class 2, Grade E or F<br>-Nickel Plate .0004- .0006<br>- Certificate of Conformity is required                 | Firmed | 5/28/18  | 21 pcs         | 0 pcs             | 21 pcs  | \$1.69014085/pcs             | \$35.49        |
| 4         | 175633 | C3-3-4   | Link Pin<br>-Issue P/O to Groupe Altech: P/O<br><br>-Nickel plate, QQ-N-290, Class 2, Grade E or F<br>-Nickel Plate .0004- .0006<br>-Bake after plating<br>-Certificate of Conformity is required | Firmed | 5/28/18  | 30 pcs         | 0 pcs<br>328      | 30 pcs  | \$1.69014085/pcs<br>M1805123 | \$50.70        |

**Grand Total:** \$86.20

## Order Notes

CC.

**DAS**  
**11**  
**9-89**





## Certificat de Conformité / Certificate of Compliance

(009594-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9  
Tel: 514-335-3666 Fax: 514-335-3868  
www.groupaltech.com

## Bon de Livraison / Packing Slip

009594 - 1

Livré à / Ship to

**DART AEROSPACE LTD**  
1270 ABERDEEN STREET  
HAWKESBURY, ON, K6A1K7  
CANADA  
Tel.: 613-632-5200 Fax.:

Client / Customer:

**DART AEROSPACE LTD**  
1270 ABERDEEN STREET  
HAWKESBURY, ON, K6A1K7  
CANADA  
BUYER:

| Date expédition<br>Ship date |                                                                           | Créé Par<br>Generated By                                                                                                      | Transport / No de Compte<br>Courier / Acc. No. |                   | Bon de commande Client<br>Customer Purchase Order No. |                   |               |                        |
|------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|-------------------|-------------------------------------------------------|-------------------|---------------|------------------------|
| 25-May-2018                  |                                                                           | Aman                                                                                                                          |                                                |                   | PO039962                                              |                   |               |                        |
| #Ligne<br>Line#              | No. de Série / # Pièce<br>Part Number /Line Item Details<br>Job # / Ref # | Description pièce(s)                                                                                                          | CATG.<br>U/M                                   | Comm.<br>/Ordered | Exp/<br>Shipped                                       | Qté NC/<br>NC Qty | Qté<br>Scrap/ | À venir/<br>Back Order |
| 2                            | C10-8<br>Rev.                                                             | C10-8<br>01 -E-NIC STEEL 200 [E-NICKEL STEEL 200]<br>QQ-N-290 CLASS 2 GRADE E OR F 0.0004-0.0006 THICK<br>BAKE AFTER PLATING  | E-NICKEL STEEL<br>CH                           | 20                | 20                                                    | 0                 | 0             | 0                      |
| 3                            | RBT18591-5<br>Rev.                                                        | RBT18591-5<br>01 -OXIDE BLACK [OXIDE BLACK ]<br>MIL-C-13924C<br>CLASS 1                                                       | BLACK-OXIDE<br>CH                              | 10                | 10                                                    | 0                 | 0             | 0                      |
| 4                            | C3-3-4<br>Rev.                                                            | C3-3-4<br>01 -E-NIC STEEL 200 [E-NICKEL STEEL 200]<br>QQ-N-290 CLASS 2 GRADE E OR F 0.0004-0.0006 THICK<br>BAKE AFTER PLATING | E-NICKEL STEEL<br>CH                           | 30                | 30                                                    | 0                 | 0             | 0                      |

DA  
1  
9-8

MAY 28 2018

## Notes Additionnelles / Additional Notes

Epaisseur réelle  
Actual ThicknessInspecteur Qualité  
Quality InspectorRéçu par  
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.  
Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.  
Our financial and legal responsibility will not be higher than the amount of invoice.